User’s Manual

POS60-5B-C1G
POS60-2B-C1G
POS60-8B-C1G

Copyrights

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Liability Disclaimer

In no event will the manufacturer be liable for direct, indirect, special, incidental, or consequential damages arising out of the use or inability to use the product or documentation, even if advised of the possibility of such damages.

Regulatory Information

FCC Notices

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the Federal Communications Commission (FCC) Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

• Increase the separation between the equipment and the receiver.

• Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.

• Consult the dealer or an experienced radio or television technician for help.

This device complies with Part 15 (B) of the FCC Rules. Operation is subject to the following two conditions:

1) this device may not cause harmful interference and

2) this device must accept any interference received, including interference that may cause undesired operation.

NOTE: THE MANUFACTURER IS NOT RESPONSIBLE FOR ANY RADIO OR TV INTERFERENCE CAUSED BY UNAUTHORIZED MODIFICATIONS TO THIS DEVICE. SUCH MODIFICATIONS COULD VOID THE USER'S AUTHORITY TO OPERATE THE DEVICE.

CE Notice

This device complies with **EMC Directive 2004/108/EC** issued by the Commission of the European Community.

WEEE Notice

The **WEEE** mark applies only to countries within the European Union (EU) and Norway.
This appliance is labeled in accordance with **European Directive 2002/96/EC** concerning **waste electrical and electronic equipment** (**WEEE**). The Directive determines the framework for the return and recycling of used appliances as applicable throughout the European Union. This label is applied to various products to indicate that the product is not to be thrown away, but rather reclaimed upon end of life per this Directive.

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1.

Introduction

Today's retail environment needs and requires more powerful, reliable and flexible POS system to guarantee best service and sound stocking-selling-storing management. Fast checkout operations and seamless service are essential and fundamental to meet customers' satisfaction. EBN's SolidPOS 60 series is born to be the solutions for all concerns mentioned above.

EBN's SolidPOS 60 series adopts compact and space-saving chassis design. Its small footprint and angle-adjustable (45 degree) LCD display (2", 5" and 8" availible) give you the best flexibility to position your POS hardware to suit your space arrangement. The front and concealed I/O panel offer excellent cable management for a clean counter and to prevent accidental disconnection.

Fast and stable performances are most important issues for service business. With Intel ULV Celeron M 1GHz w/o L2 Cache and Intel 852GM + ICH4 onboard, SolidPOS 60 series could be at your service 24 X 7 and minimize maintenance required.

Combined and equipped with all industry-standard I/O port, SolidPOS 60 series is an all-in-one touch POS terminal with unlimited flexible compatibility and extensibility to integrate with other accessories and devices. With one cash drawer port, Gigabit Ethernet port, 4 USB 2.0 ports, one RS-232/422/485 port and 3 RS-232 ports equipped, SolidPOS 60 series can be expanded and connected with all expanded devices required – 31 key keyboard, customer display, MSR , cash drawer and iButton…etc, to help user to conquer challenges from variable business markets.

SolidPOS 60 series supports most popular Microsoft Windows series operation system (Windows XP Home Edition, Windows XP Professional Edition, WEPOS and Linux, making user spend less effort on technology and software- related issues— so user can devote all energy making your business successful.

Features:

- Intel® low power consumption and high performance technology
- Tool-free and modular design - easy upgrade and assembly/disassembly
- 4x USB 2.0,1 x RS-485/422/232, 3 x RS-232, Gigabit Ethernet port (RJ-45) and cash drawer port (RJ-11) equipped
- Peripherals (31 key keyboard, customer display, MSR, cash drawer and iButton) expandable.
- Microsoft Windows series operation system (Windows XP Home Edition, Windows XP Professional Edition and WEPOS) and open-source Linux operation system supported.

2.

Unpacking the Box

Verify that the box contains the following items.

1	Device X 1
2	Driver and utility CD X 1
3	Power Adaptor X 1
4	Power Cord X 1
5	HDD screws X 4

3.

Hardware Setup

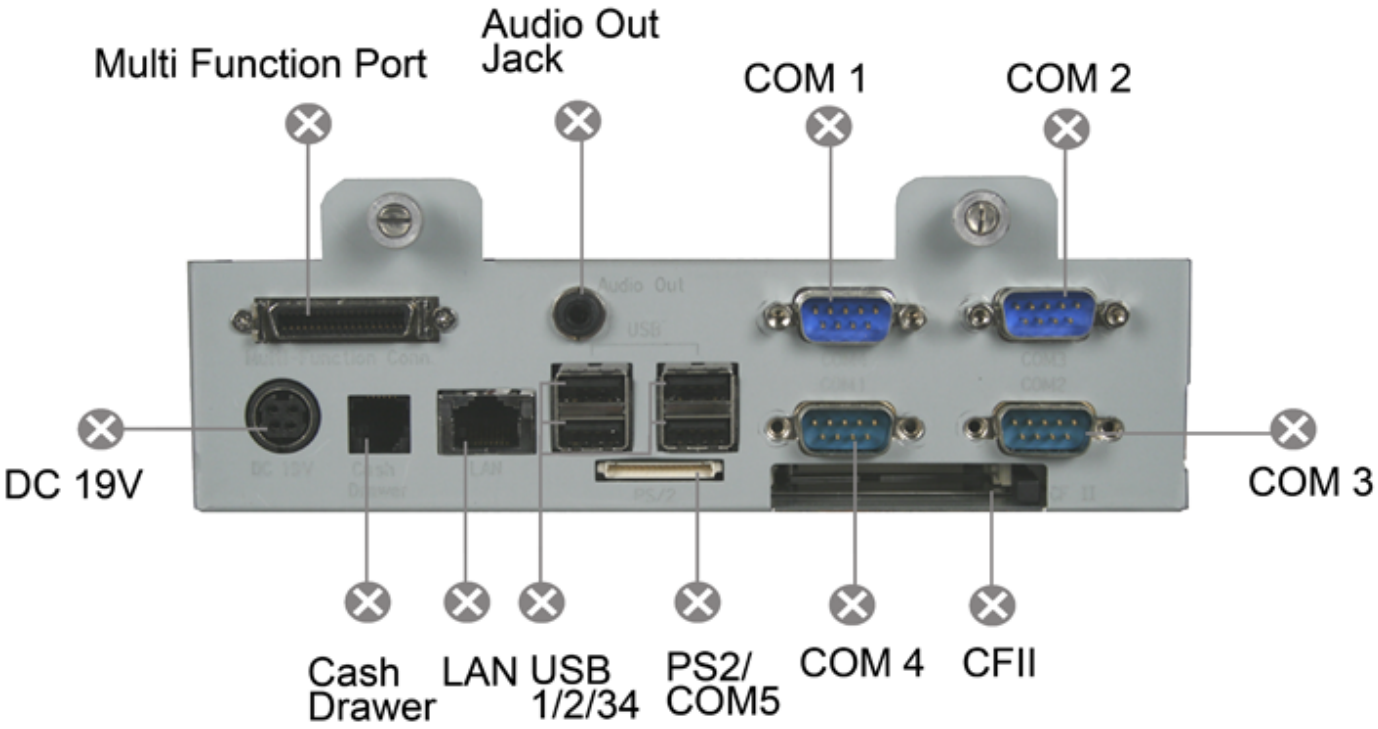
3.1. Quick Tour

Front View

LED Indicator

	The **Power** indicator will glow green when power is on.
	The **HDD** indicator will blink green when the HDD is accessed.
	The **LAN** indicator will blink green when transferring data though the LAN.

Back Panel I/O



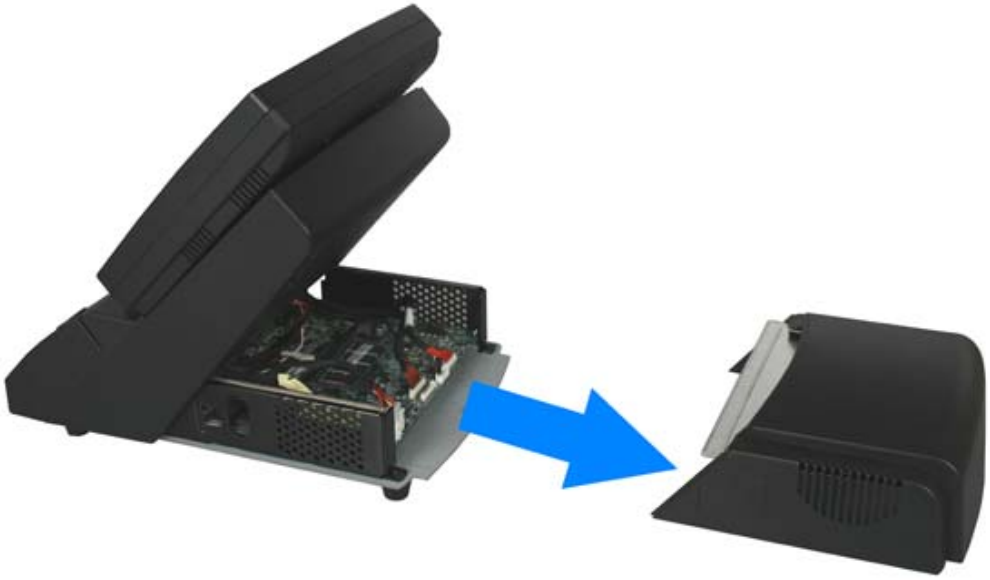
Note: The I/O panel is covered by the front cover. For details about removing the from cover, please see

Note: For details of I/O ports on the back panel, please refer to Chapter 7 – I/O Definition.

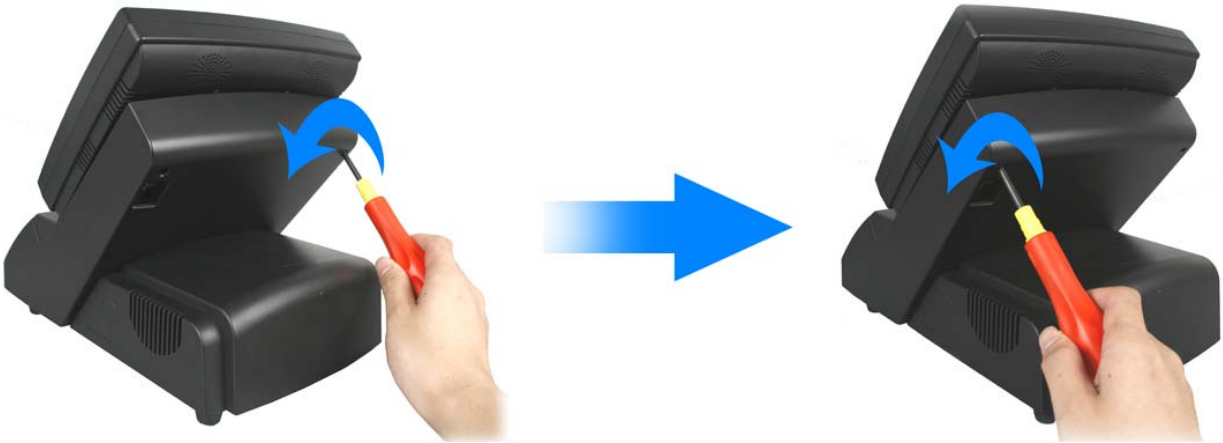
3.2. HDD installation

1. Loosen the tool-free screw anticlockwise on the bottom of the device as shown below.

2. Remove the back cover from the device by pulling back.



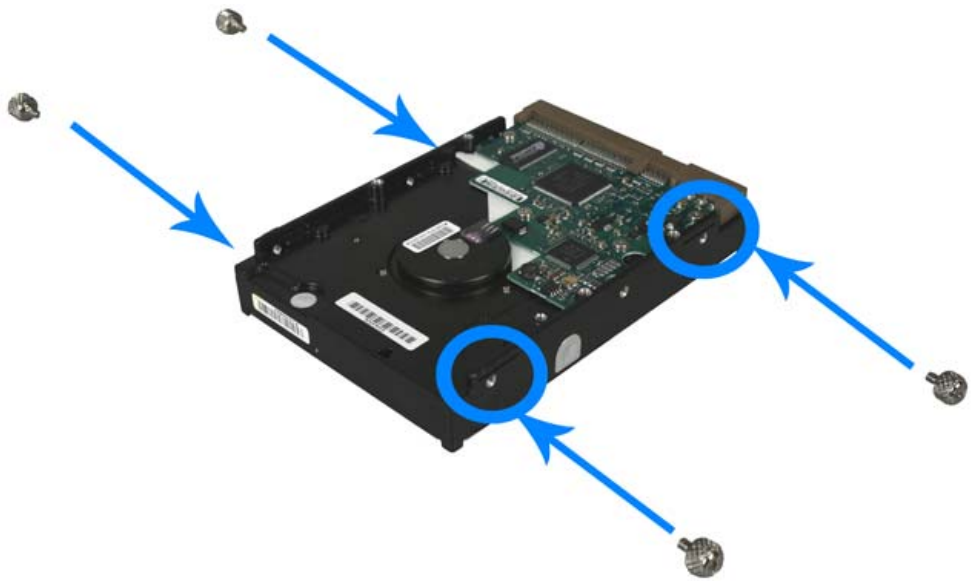
3. Loosen and remove two screws on the middle cover by #1 Phillips screwdriver.



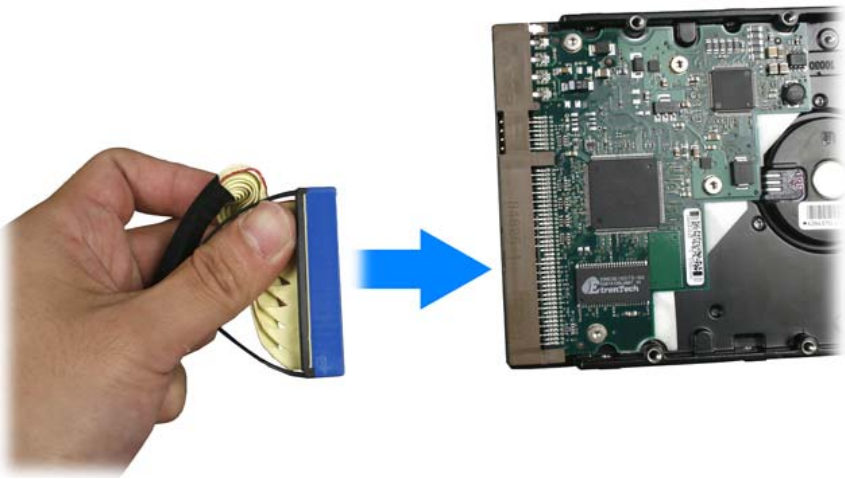
4. Pull the middle cover in the direction as shown below.

5. Bend the middle cover softly in the direction as shown below to remove it from the device.

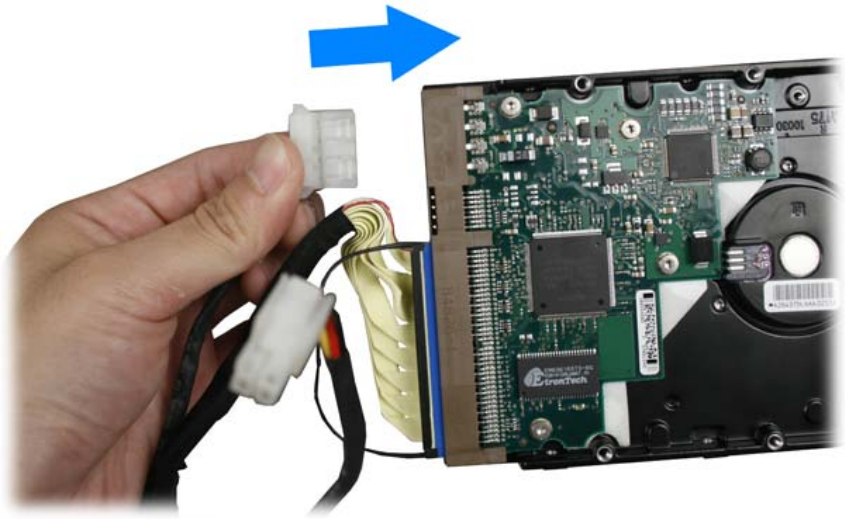
6. Install the four HDD screws as shown below.



7. Connect the IDE cable to the HDD.



8. Connect the power cable to the HDD.

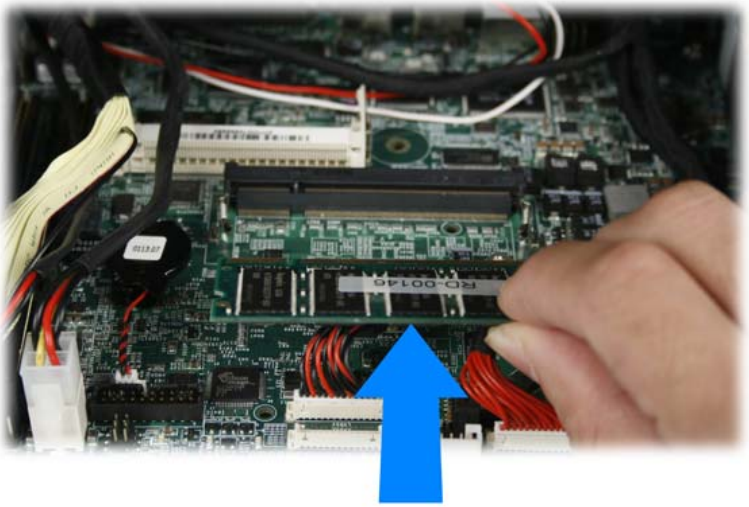


9. Install the HDD to the device.

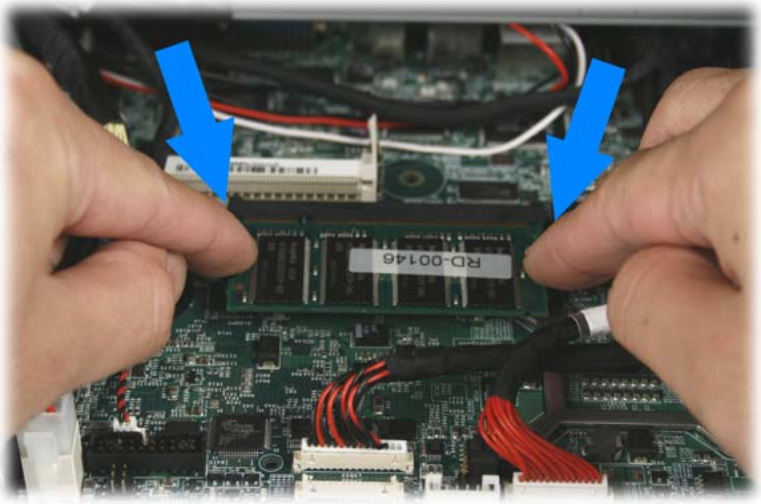
10. Tighten the five screws as shown below.

3.3. RAM installation

1. Align and insert the new RAM into the slot.



2. Push both ends of the RAM down until the ejectors snap into place.



3.3. Turn on the Device

1. Connect the four pin connector of the power adapter into the DC 19V socket on the I/O panel, and the other end into the grounded wall outlet properly.

2. Press and hold the power switch until the power indicator on the front panel glow green.

4.

Peripherals Installation

4.1. Customer Display Installation

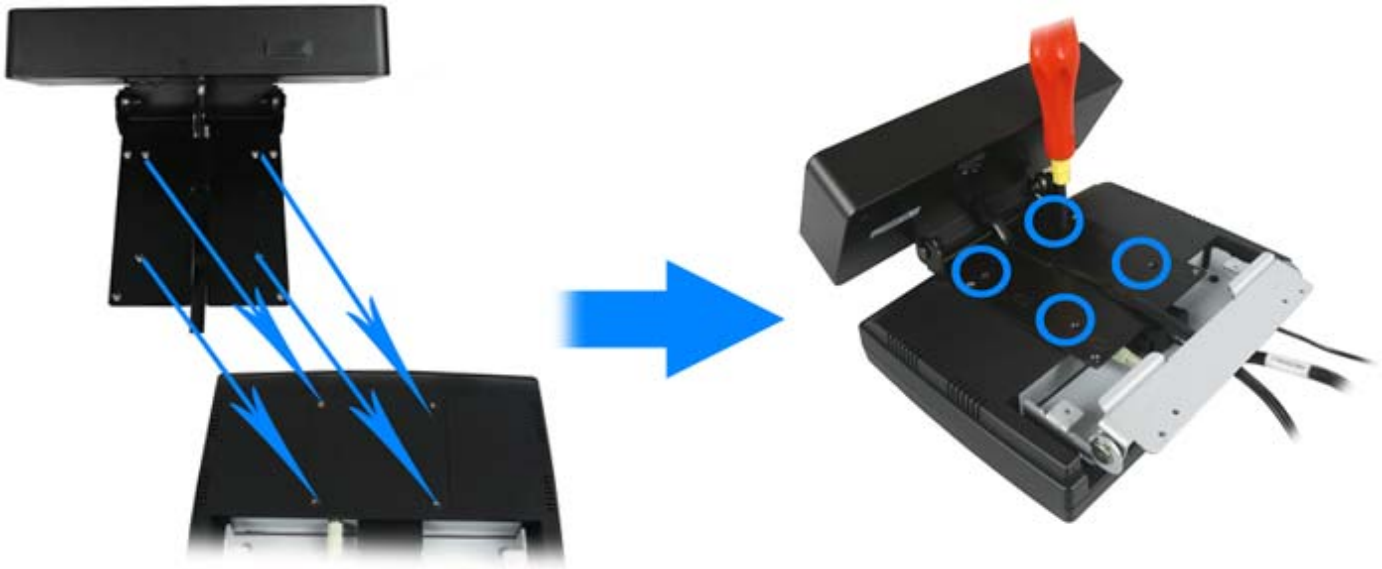
1. Loosen the two tool-free screws anticlockwise on the bottom of the device as shown below.
2. Remove the front covert assembly,

3. Disconnect the green speaker jack and the black multi function connector.

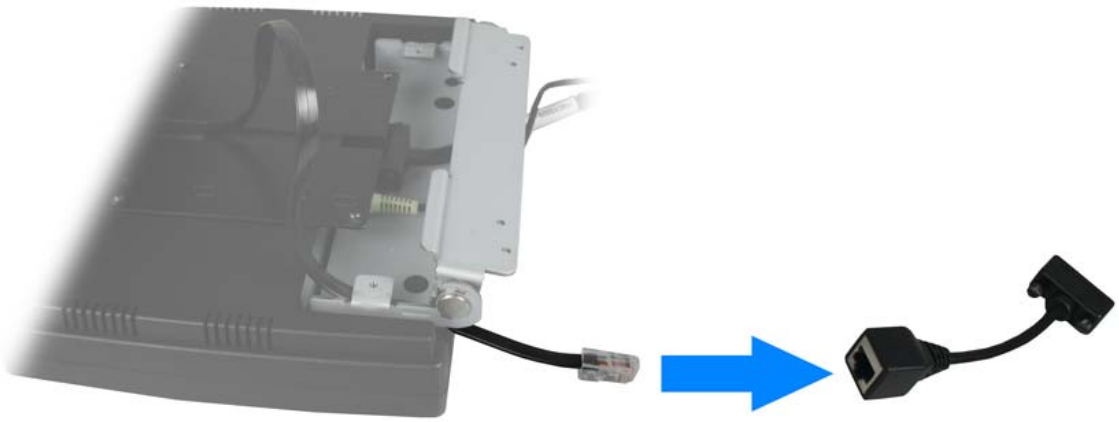
4. Loosen and remove four screws by #1 Phillips screwdriver as shown below.

5. Remove the LCD panel assembly from the device.

6. Align the four screw holes of the customer display to the brown-yellow screw holes of the LCD panel assembly, and then tighten screws by #1 Phillips screwdriver as shown below.

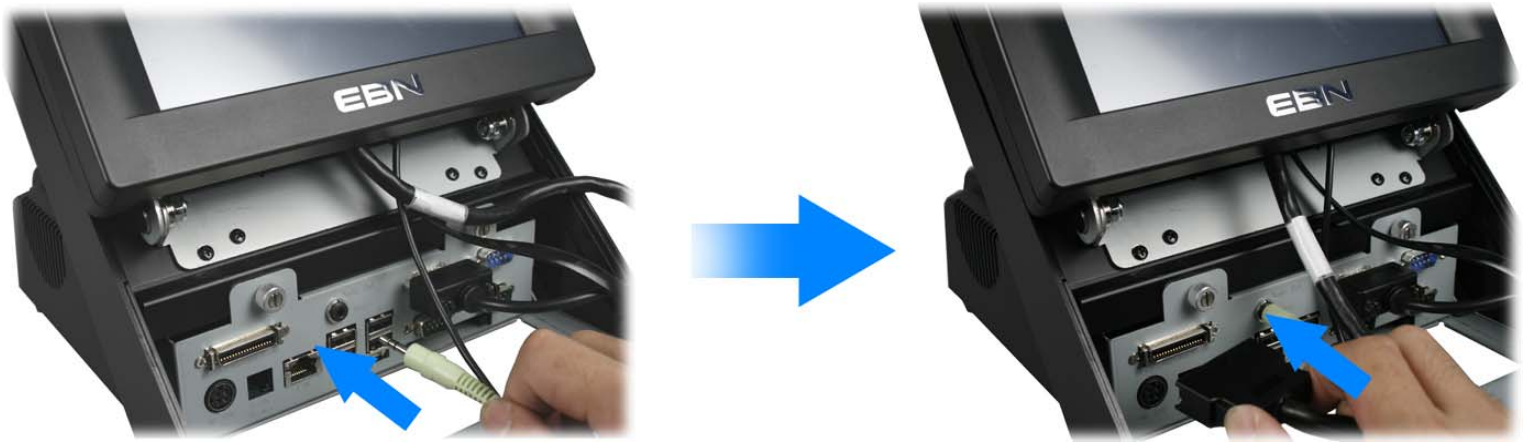


7. Connect the RJ-45 connecter to the D-Sub 9 Cable, and the install the LCD panel assembly to the device.



8. Connect the RS-232 connector of the D-Sub 9 Cable to the COM port of the device.

10. Connect the speaker cable t and the multi function connecter to the device as shown below.



4.2. Keyboard assembly Installation (Keyboard, MSR and iButton)

1. Connect the PS2/COM5 connecter to the PS2/COM5 port of the device.

2. Install the keyboard assembly to the device.

3. Tighten the two screws as shown below.

5.

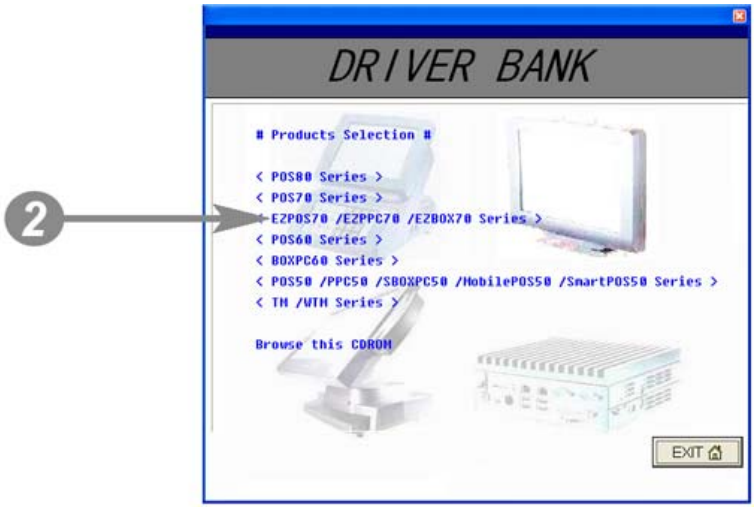
Driver and Utility Installation

5.1. Before the installation

All installation procedures described below are based on Microsoft Windows XP.

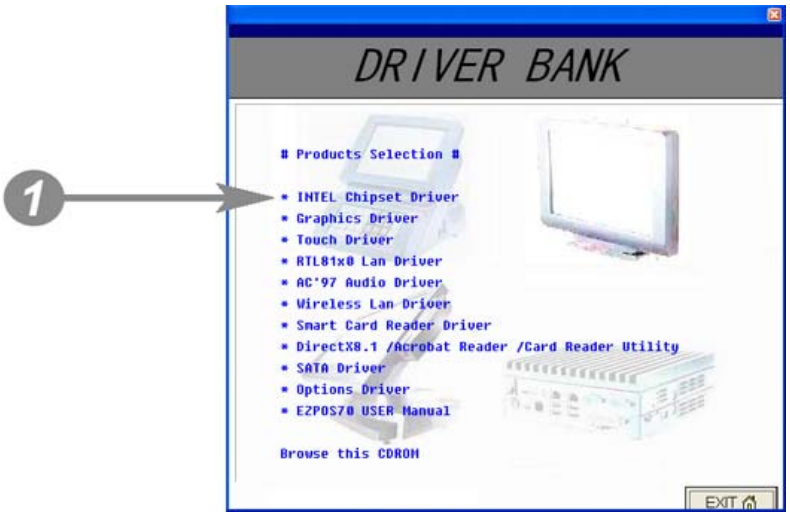
1. Connect an external USB CDROM drive to the USB port and insert the driver CD and turn on the device. The program autoruns and displays the ***DRIVER BANK*** screen.

2. Click "**EZPOS70 /EZPPC70 /EZBOX70 Series**".

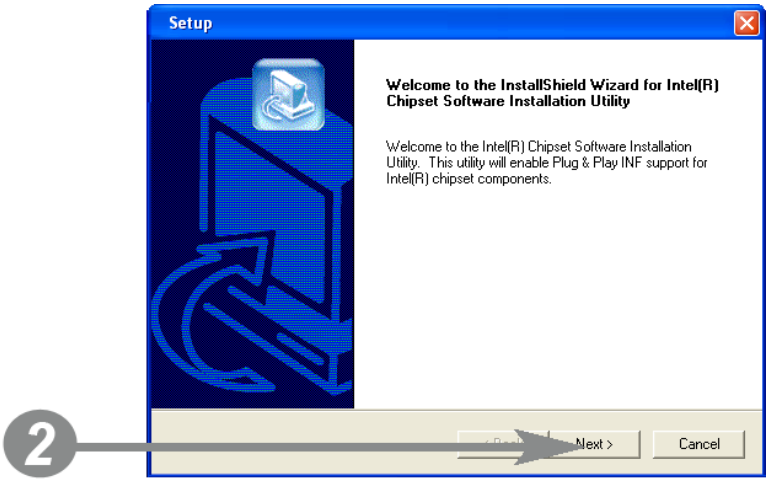


5.2. Chipset Software Installation

1. Click **INTEL Chipset Driver**.

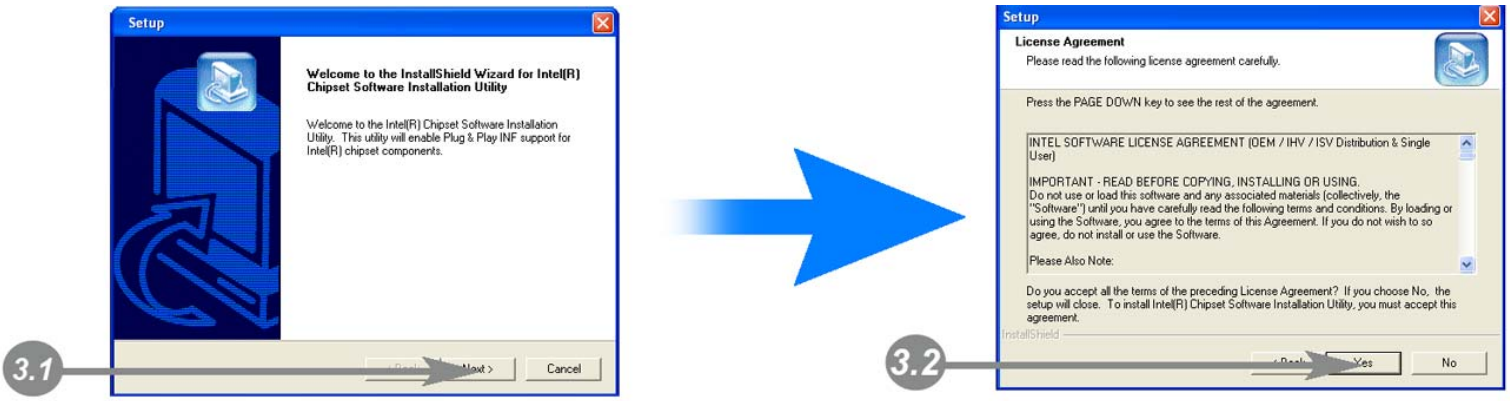


2. Click **Next**.

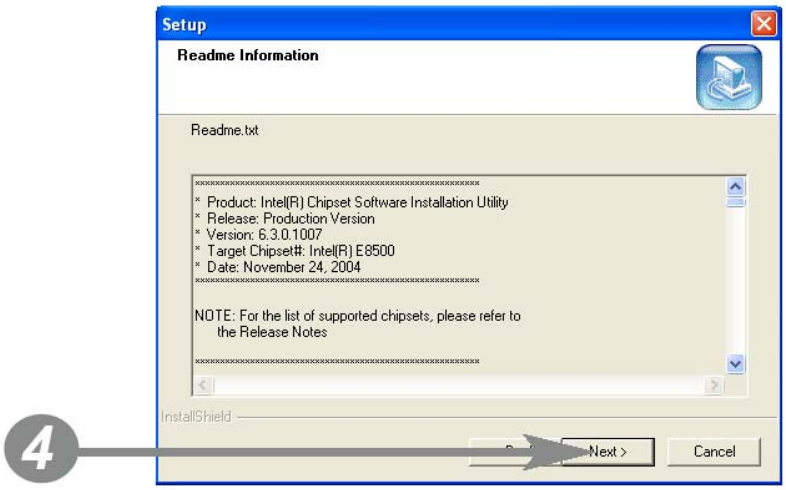

Setup
Welcome to the InstallShield Wizard for Intel(R) Chipset Software Installation Utility
Welcome to the Intel(R) Chipset Software Installation Utility. This utility will enable Plug & Play INF support for Intel(R) chipset components.
Next >
Cancel
2

3.1. Click **Next**.

3.2. Read the License Agreement carefully and click **Yes**.

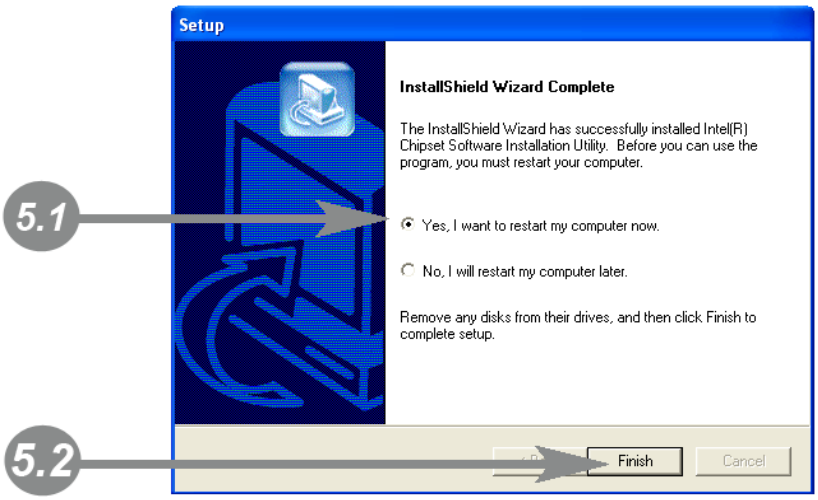

Setup
Welcome to the InstallShield Wizard for Intel(R) Chipset Software Installation Utility
Welcome to the Intel(R) Chipset Software Installation Utility. This utility will enable Plug & Play INF support for Intel(R) chipset components.
Next >
Cancel
3.1
Setup
License Agreement
Please read the following license agreement carefully.
Press the PAGE DOWN key to see the rest of the agreement.
INTEL SOFTWARE LICENSE AGREEMENT (OEM / IHV / ISV Distribution & Single User)
IMPORTANT - READ BEFORE COPYING, INSTALLING OR USING.
Do not use or load this software and any associated materials (collectively, the "Software") until you have carefully read the following terms and conditions. By loading or using the Software, you agree to the terms of this Agreement. If you do not wish to so agree, do not install or use the Software.
Please Also Note:
Do you accept all the terms of the preceding License Agreement? If you choose No, the setup will close. To install Intel(R) Chipset Software Installation Utility, you must accept this agreement.
InstallShield
Yes
No
3.2

4. Click **Next**.



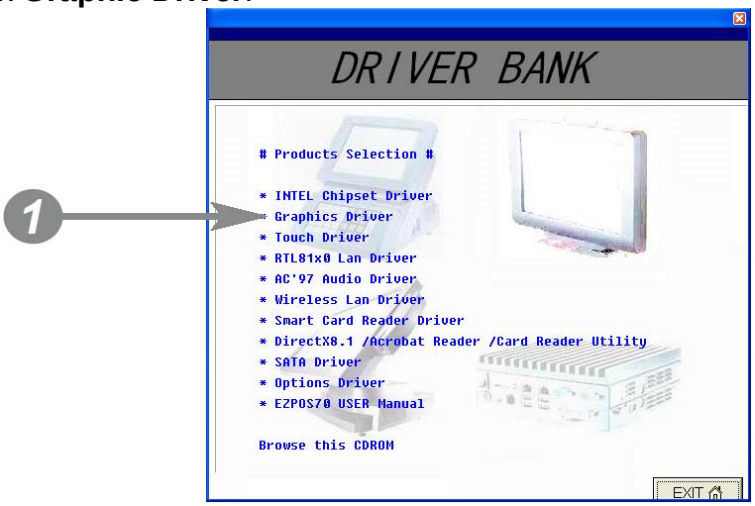
5.1. Select restart your computer right now or later.

5.2. Click **Finish**.

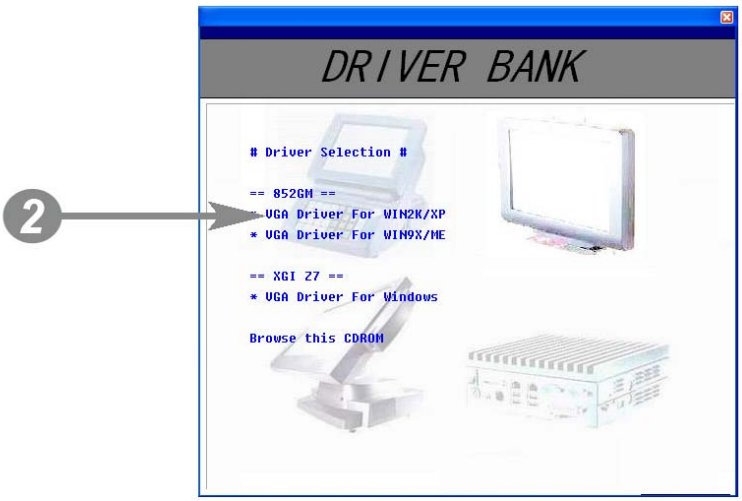

Setup
InstallShield Wizard Complete
The InstallShield Wizard has successfully installed Intel(R) Chipset Software Installation Utility. Before you can use the program, you must restart your computer.
Yes, I want to restart my computer now.
No, I will restart my computer later.
Remove any disks from their drives, and then click Finish to complete setup.
Finish
Cancel
5.1
5.2

5.3. VGA Driver Installation

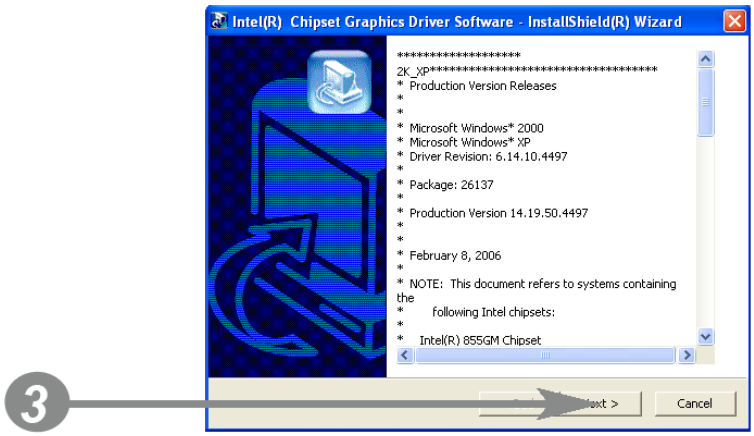
1. Click **Graphic Driver**.



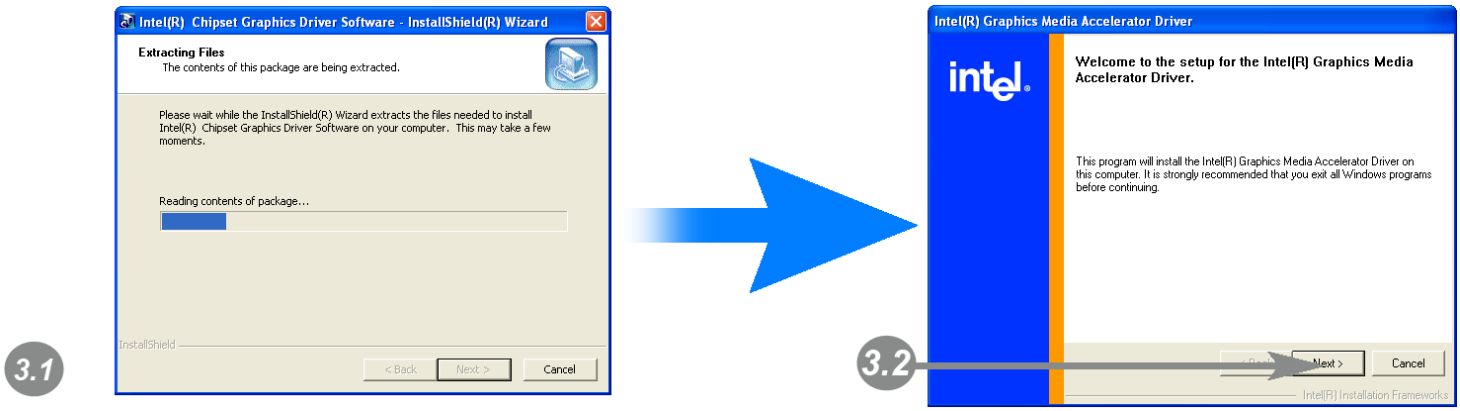
2. Click **VGA Driver for WIN2K/XP**.



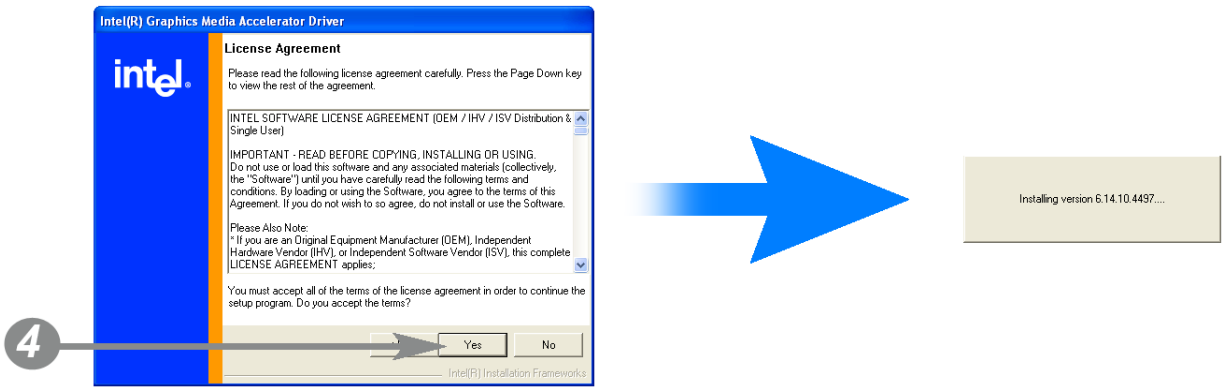
3. Click **Next**.


Intel(R) Chipset Graphics Driver Software - InstallShield(R) Wizard
2K_XP
* Production Version Releases
* Microsoft Windows* 2000
* Microsoft Windows* XP
* Driver Revision: 6.14.10.4497
* Package: 26137
* Production Version 14.19.50.4497
* February 8, 2006
* NOTE: This document refers to systems containing the following Intel chipsets:
* Intel(R) 855GM Chipset
3
Cancel

3.1. After files extracted, click **Next** on the welcome screen.

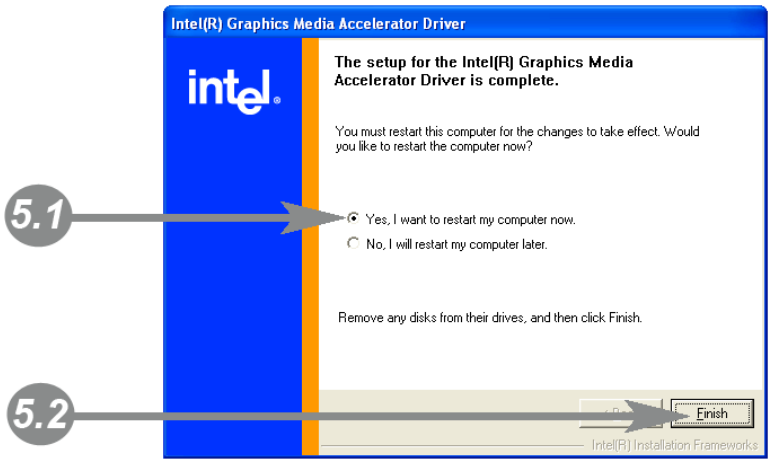

Intel(R) Chipset Graphics Driver Software - InstallShield(R) Wizard
Extracting Files
The contents of this package are being extracted.
Please wait while the InstallShield(R) Wizard extracts the files needed to install Intel(R) Chipset Graphics Driver Software on your computer. This may take a few moments.
Reading contents of package...
InstallShield
< Back
Next >
Cancel
3.1
Intel(R) Graphics Media Accelerator Driver
intel
Welcome to the setup for the Intel(R) Graphics Media Accelerator Driver.
This program will install the Intel(R) Graphics Media Accelerator Driver on this computer. It is strongly recommended that you exit all Windows programs before continuing.
Next >
Cancel
Intel(R) Installation Frameworks
3.2

4. Read the License Agreement carefully and click **Yes**, and then the installation starts.


Intel(R) Graphics Media Accelerator Driver
intel
License Agreement
Please read the following license agreement carefully. Press the Page Down key to view the rest of the agreement.
INTEL SOFTWARE LICENSE AGREEMENT (OEM / IHV / ISV Distribution & Single User)
IMPORTANT - READ BEFORE COPYING, INSTALLING OR USING.
Do not use or load this software and any associated materials (collectively, the "Software") until you have carefully read the following terms and conditions. By loading or using the Software, you agree to the terms of this Agreement. If you do not wish to so agree, do not install or use the Software.
Please Also Note:
* If you are an Original Equipment Manufacturer (OEM), Independent Hardware Vendor (IHV), or Independent Software Vendor (ISV), this complete LICENSE AGREEMENT applies;
You must accept all of the terms of the license agreement in order to continue the setup program. Do you accept the terms?
4
Yes
No
Intel(R) Installation Frameworks
Installing version 6.14.10.4497....

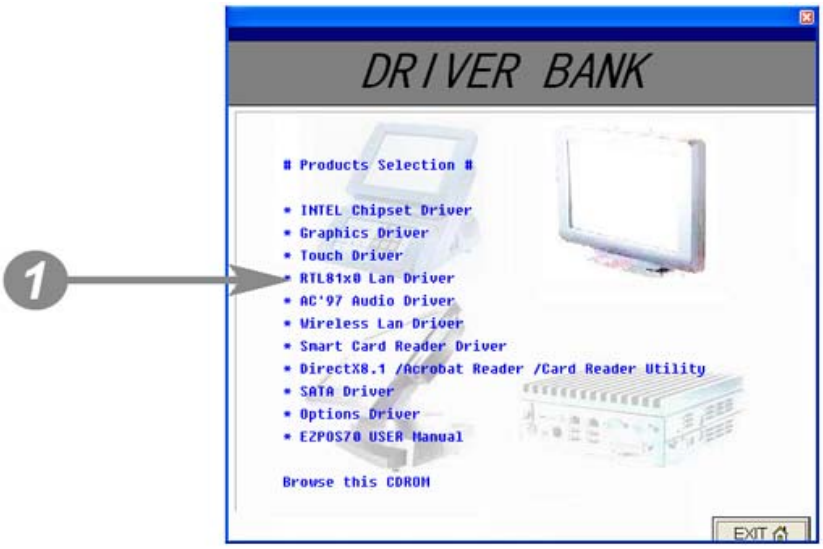
5.1. Select restart your computer right now or later.

5.2. Click **Finish**.


Intel(R) Graphics Media Accelerator Driver
intel
The setup for the Intel(R) Graphics Media Accelerator Driver is complete.
You must restart this computer for the changes to take effect. Would you like to restart the computer now?
Yes, I want to restart my computer now.
No, I will restart my computer later.
Remove any disks from their drives, and then click Finish.
Finish
Intel(R) Installation Frameworks
5.1
5.2

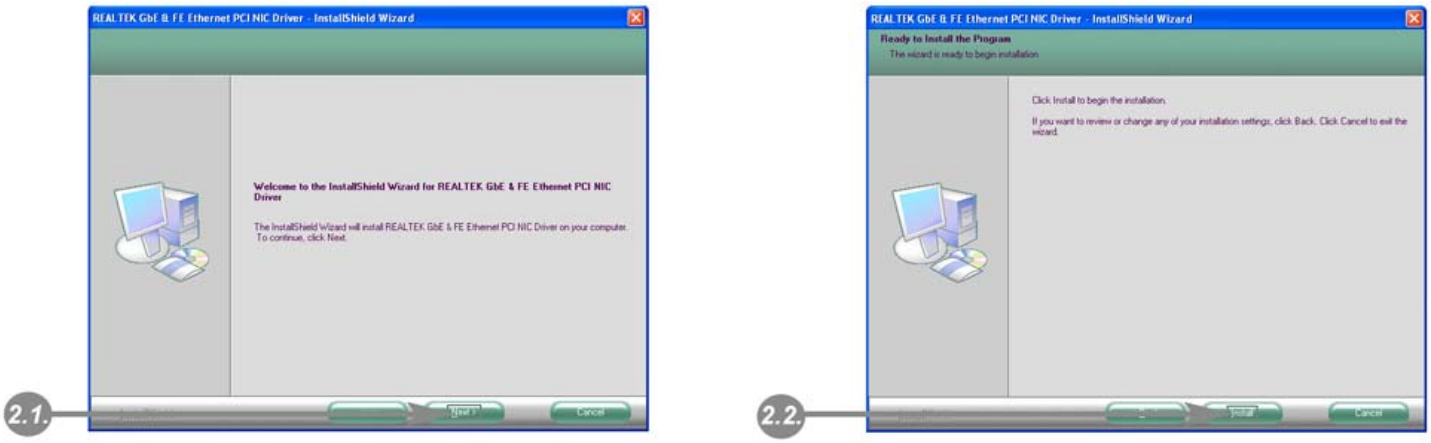
5.4. LAN Driver Installation

1. Click **RTL81x0 LAN Driver**.



On the welcome screen, click **Next**.

Click Install to begin the installation.

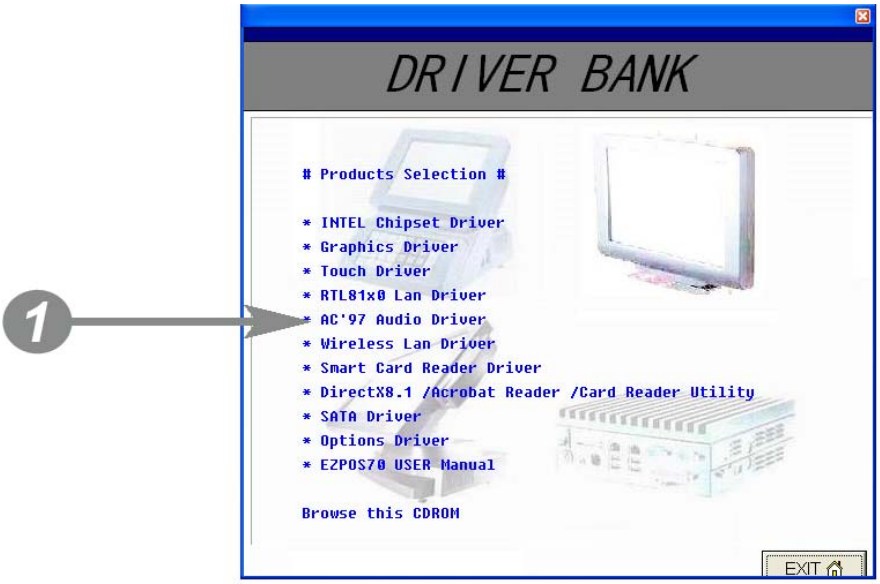

REALTEK GbE & FE Ethernet PCI NIC Driver - InstallShield Wizard
Welcome to the InstallShield Wizard for REALTEK GbE & FE Ethernet PCI NIC Driver
The InstallShield Wizard will install REALTEK GbE & FE Ethernet PCI NIC Driver on your computer. To continue, click Next.
Next
Cancel
2.1.
REALTEK GbE & FE Ethernet PCI NIC Driver - InstallShield Wizard
Ready to Install the Program
The wizard is ready to begin installation.
Click Install to begin the installation.
If you want to review or change any of your installation settings, click Back. Click Cancel to exit the wizard.
Install
Cancel
2.2.

3. Click **Finish**.

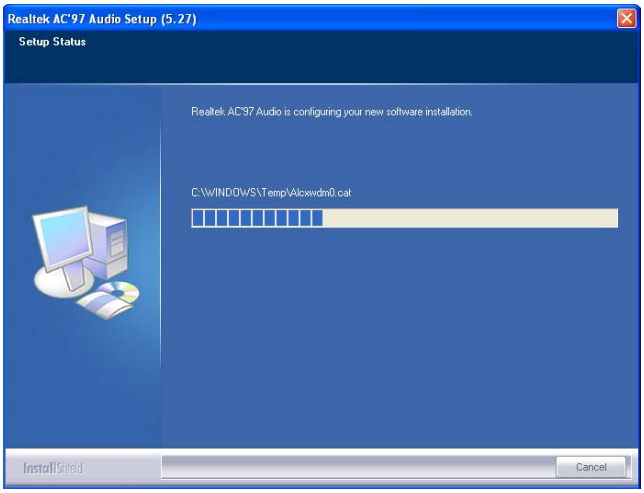
REALTEK GbE & FE Ethernet PCI NIC Driver - InstallShield Wizard
InstallShield Wizard Complete
The InstallShield Wizard has successfully installed REALTEK GbE & FE Ethernet PCI NIC Driver. Click Finish to exit the wizard.
Finish
Cancel
3

5.5. Audio Driver Installation

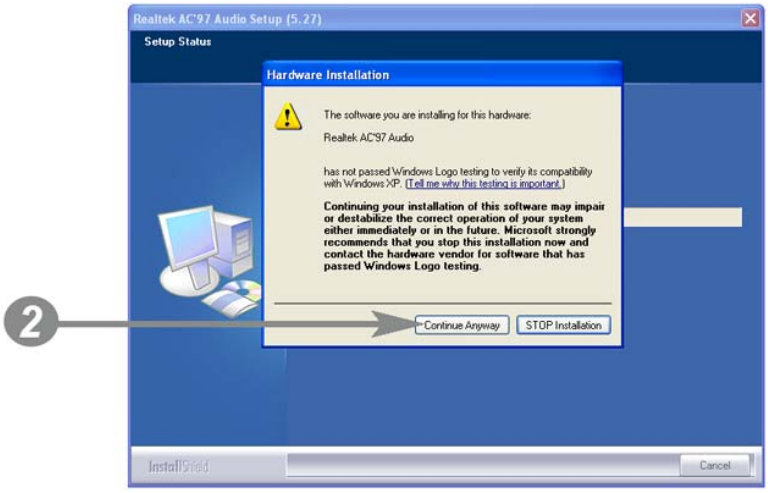
1. Click **AC'97 Audio Driver.**



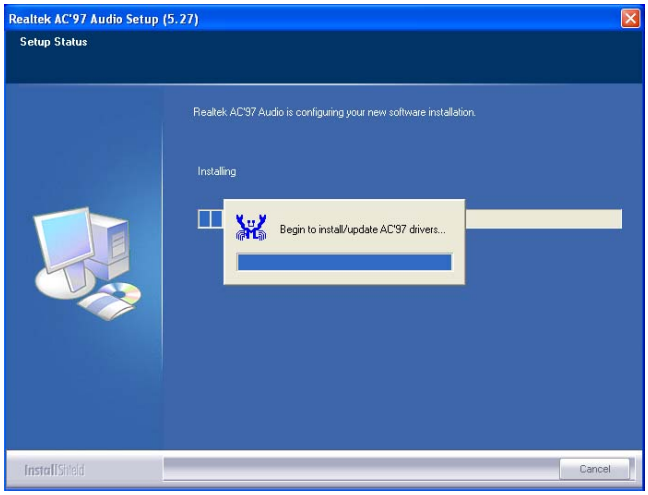
2. Configures new software installation.



3. Click **Configure Anyway**.

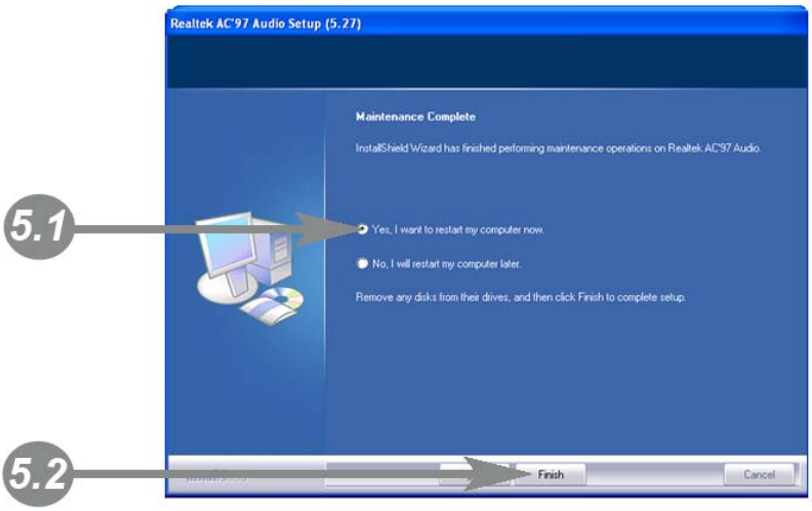

Realtek AC'97 Audio Setup (5.27)
Setup Status
Hardware Installation
The software you are installing for this hardware:
Realtek AC'97 Audio
has not passed Windows Logo testing to verify its compatibility with Windows XP. (Tell me why this testing is important.)
Continuing your installation of this software may impair or destabilize the correct operation of your system either immediately or in the future. Microsoft strongly recommends that you stop this installation now and contact the hardware vendor for software that has passed Windows Logo testing.
2
Continue Anyway
STOP Installation
InstallShield
Cancel

4. AC'97 drivers begins to install.



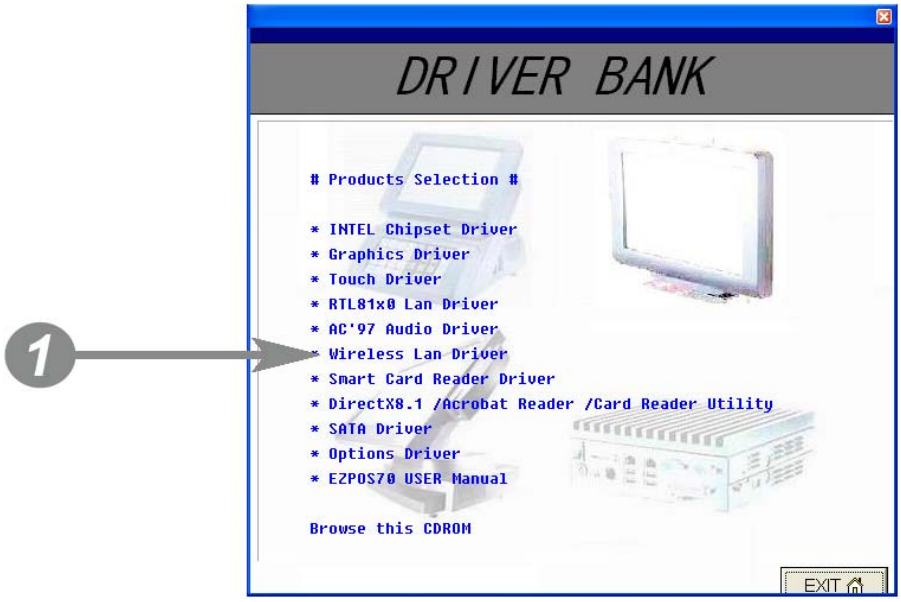
5.1. Select restart your computer right now or later.

5.2. Click **Finish**.

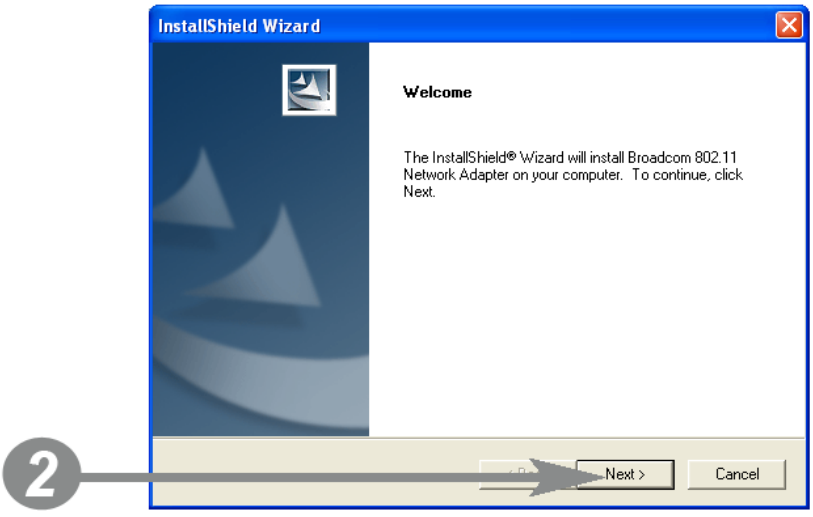

Realtek AC'97 Audio Setup (5.27)
Maintenance Complete
InstallShield Wizard has finished performing maintenance operations on Realtek AC'97 Audio.
Yes, I want to restart my computer now.
No, I will restart my computer later.
Remove any disks from their drives, and then click Finish to complete setup.
Finish
Cancel
5.1
5.2

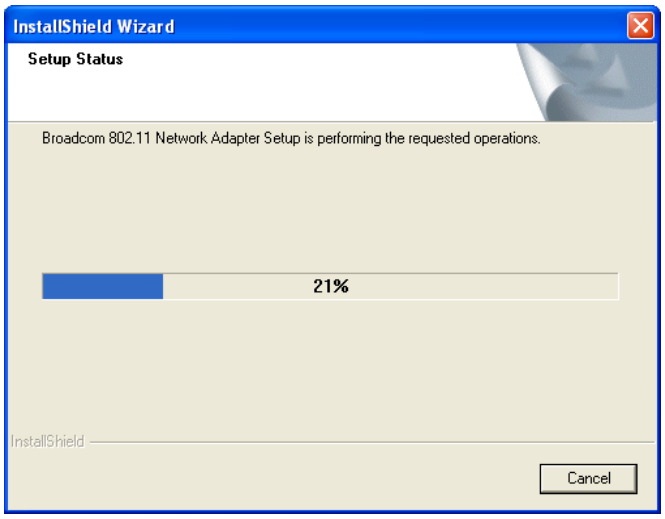
5.6. Wireless LAN Driver Installation

1. Click **AC'97 Audio Driver.**



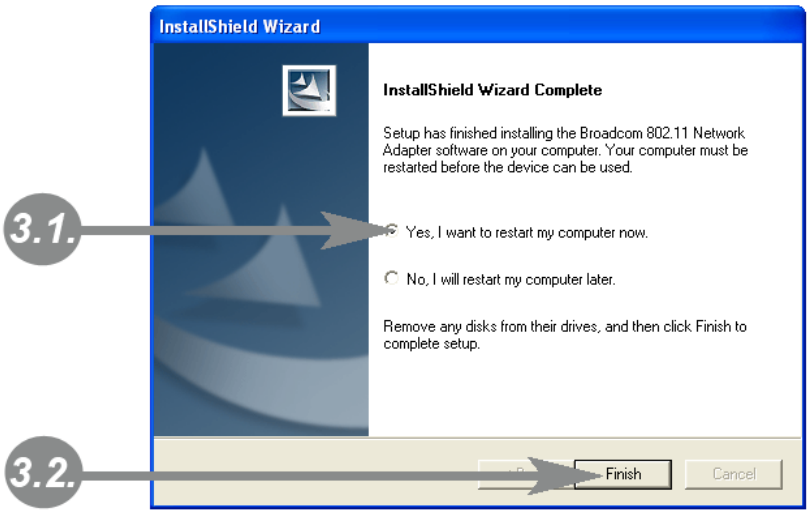
2. On the welcome screen, click **Next**, and then the installation begins.





3.1. Select restart your computer right now or later.

3.2. Click **Finish**.


InstallShield Wizard
InstallShield Wizard Complete
Setup has finished installing the Broadcom 802.11 Network Adapter software on your computer. Your computer must be restarted before the device can be used.
Yes, I want to restart my computer now.
No, I will restart my computer later.
Remove any disks from their drives, and then click Finish to complete setup.
3.1.
3.2.
Finish
Cancel

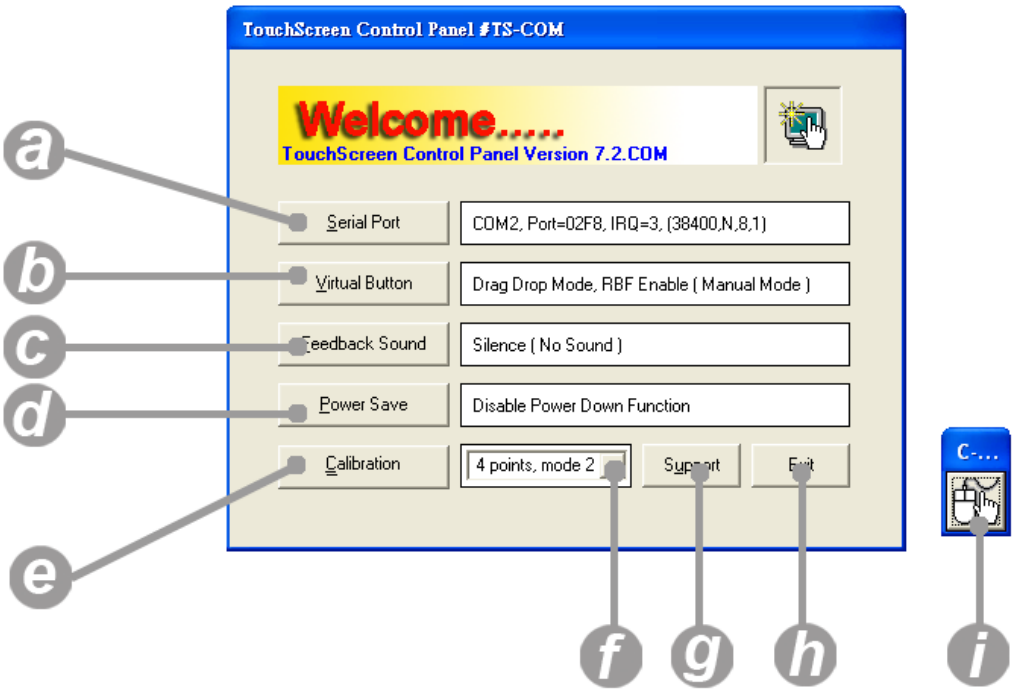
6.

Touchscreen Control Panel Quick Guide

6.1. Launch Touchscreen V7.3.COM

1. Under Microsoft Windows XP, click “**start**” menu and select “**Programs**”, under ”**Touchscreen V7.3.COM**” menu, click “**Touchscreen Control Panel V7.3.COM**”, the control panel of the program shows.

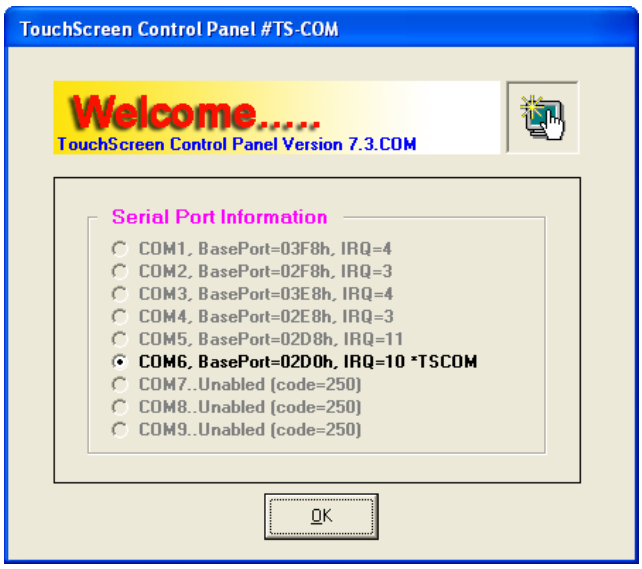
6.2. User interface



a	**Serial Port**	Display serial port information of the system.
b	**Virtual Button**	Open the virtual button setting dialogue box.
c	**Feedback Sound**	Open the feedback sound setting dialogue box.
d	**Power Save**	Open the power down timer adjustment dialogue box
e	**Calibration**	Switch to calibration screen.
f	**Calibration Mode Menu**	Select the calibration by clicking this drop-down list.
g	**Support**	Display technical support information.
h	**Exit**	Exit the program.
i	**Event Selector**	Enable right mouse button function. The default of this selector is with the left mouse button selected on. For details about event selector settings, please see “**How to Use Event Selector**” of Section 5.2.

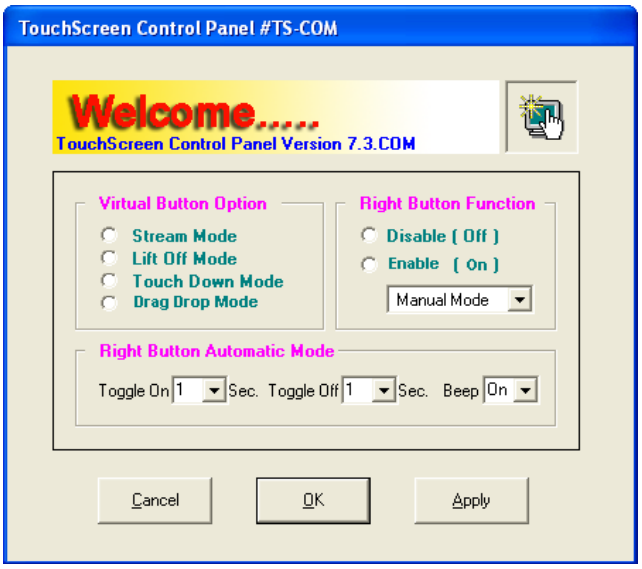
6.3. Serial Port Information

Click **Serial Port** button, the serial port information shows.
Click **OK** to back to the control panel.



6.4. Virtual Button Settings

Click **Virtual Button** button, the dialogue box shows:



The selected option will be in black.

Virtual Button Option

Under **Virtual Button Option** group box, there are four options:

- **Stream Mode**

Under this mode, all mouse button simulation will be disabled.

- **Lift off Mode**

Under **Lift off Mode**, tapping and holding on the screen equals pressing and holding on the left button of the mouse.

- **Touch Down Mode**

Under **Touch Down Mode**, one single-tapping equals one left mouse

clicking.

- **Drag Drop Mode**

Drag Drop mode allows you to select an object on the screen by tapping, and then slide the selected object to a new location on the screen, the selected object will be dropped on the new location by releasing the touch.

The selected option will be in black.

Right Button Function

- **Disabled (Off)**

  Select this option, the event selector will be disabled and disappear.
- **Enable (On)**

  Select this option, the event selector will be enabled and show on the left-bottom corner of the screen.

- **Automatic Mode/Manual Mode Drop-down List**

  If the Drag Drop Mode under **Virtual Button Option** group box is select, the drop-down menu below the **Enable (On)** option will be enabled.

  Automatic Mode

  - Select this option, the Right Button Function will switch to automatic mode and the event selector will be disabled and disappear.

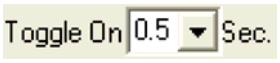
  Manual Mode

  - Select this option, the Right Button Function will switch to manual mode and the event selector will be enabled and show on the left-bottom corner of the screen.

  - Options under **Right Button Automatic Mode** will be enabled when **Manual Mode** is selected.

The selected option will be in black.

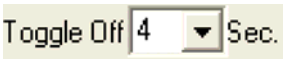
Right Button Automatic Mode



Toggle On time is the duration between the tapping on the screen and that the right mouse button is “virtually” pressed and held.

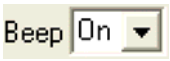
Release the tapping from screen after toggle-on, the pop-up menu shows.

The minimize value is 0.5 and maximum value is 5.



This option defines how long the right button function will be off.

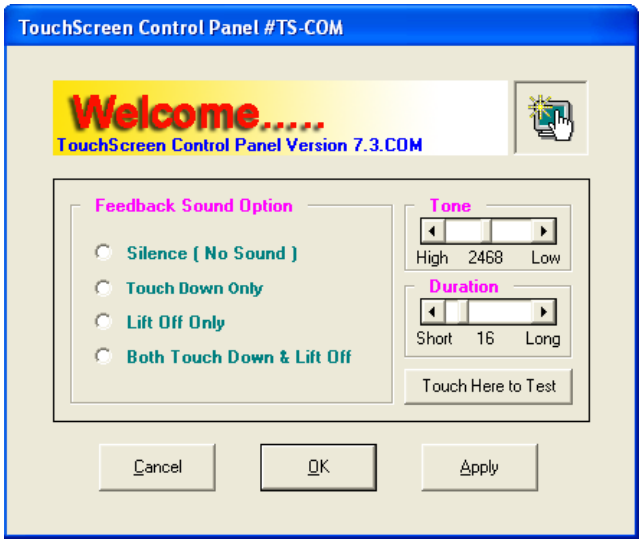
The minimize value is 0.5 and maximum value is 5.



Click the drop-down menu to select **On** or **Off** to enable or disable the beep sound effect for toggle-on and toggle off.

6.3. Feedback Sound

Click **Feedback Sound** button, the dialogue box shows:



Feedback Sound Option

Silence (No Sound)

No any sound effect.

Touch Down Only

When this option is selected, there will be one “beep” sound when tapping on the screen.

Lift Off Only

When this option is selected, there will be one “beep” sound when releasing from the screen.

Both Touch Down & Lift Off

When this option is selected, there will be one “beep” sound when

tapping on the screen and releasing from the screen.

Tone

Drag the bar to adjust the frequency of the sound effect.
The minimize value is 200 and maximum value is 5000.

Duration

Drag the bar to adjust how long the “Beep” sound will be.
The minimize value is 10 and maximum value is 50.

The selected option will be in black.

6.2. Screen Calibration

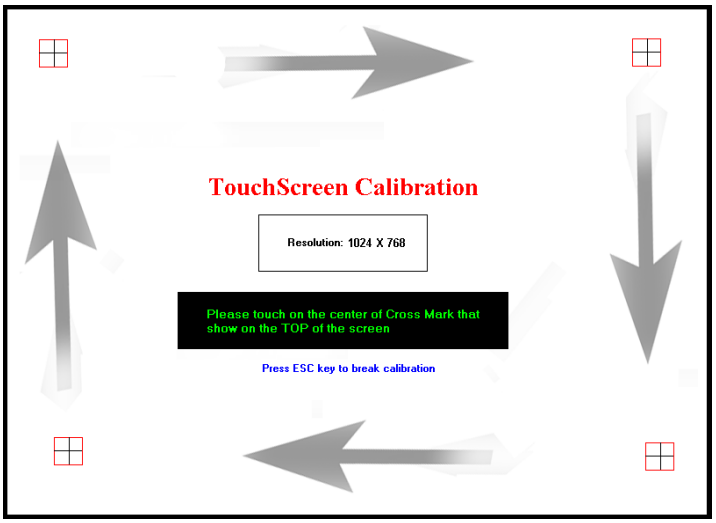
1. Click the drop menu next to the Calibration button to select calibration mode.

4 points, mode 1 – rectangular four-point calibration
4 points, mode 2 – rhombic four-point calibration

2. Click **Calibration** button to enter the calibration screen.

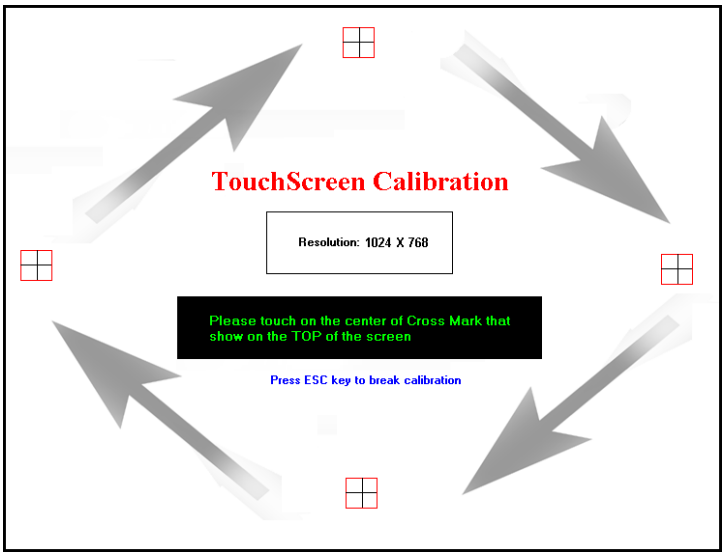
4 points, mode 1

a. The mark shows on the Left-up corner.
b. Follow the instruction in green to touch the center of Cross Mark.
c. When the instruction turns into yellow, releasing the tapping from the screen.
d. Follow the instruction in green to touch the center of Cross Mark.
e. Repeat Step 2 – Step4 to finish the calibration procedure.

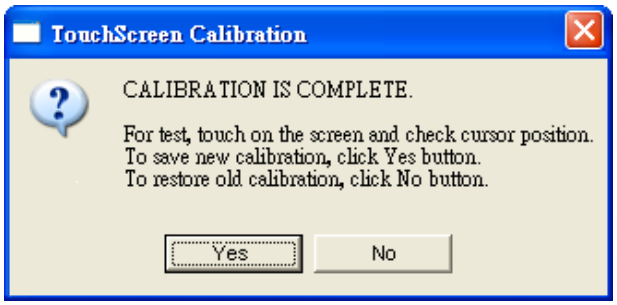

TouchScreen Calibration
Resolution: 1024 X 768
Please touch on the center of Cross Mark that show on the TOP of the screen
Press ESC key to break calibration

4 points, mode 2

a. The mark shows in the middle of the length of the screen.
b. Follow the instruction in green to touch the center of Cross Mark.
c. When the instruction turns into yellow, releasing the tapping from the screen.
d. Follow the instruction in green to touch the center of Cross Mark.
e. Repeat Step 2 – Step4 to finish the calibration procedure.


TouchScreen Calibration
Resolution: 1024 X 768
Please touch on the center of Cross Mark that show on the TOP of the screen
Press ESC key to break calibration

3. When the calibration procedure is completed, the message shows:


TouchScreen Calibration
CALIBRATION IS COMPLETE.
For test, touch on the screen and check cursor position.
To save new calibration, click Yes button.
To restore old calibration, click No button.
Yes
No

To save the new calibration, click **Yes**, to restore the old calibration, click **No**.

How to Use Event Selector

1. On the desktop of Windows, click icon.
2. icon change to .
3. Now the tapping is simulating right mouse button clicking.
4. After one tap on the screen, icon change to .

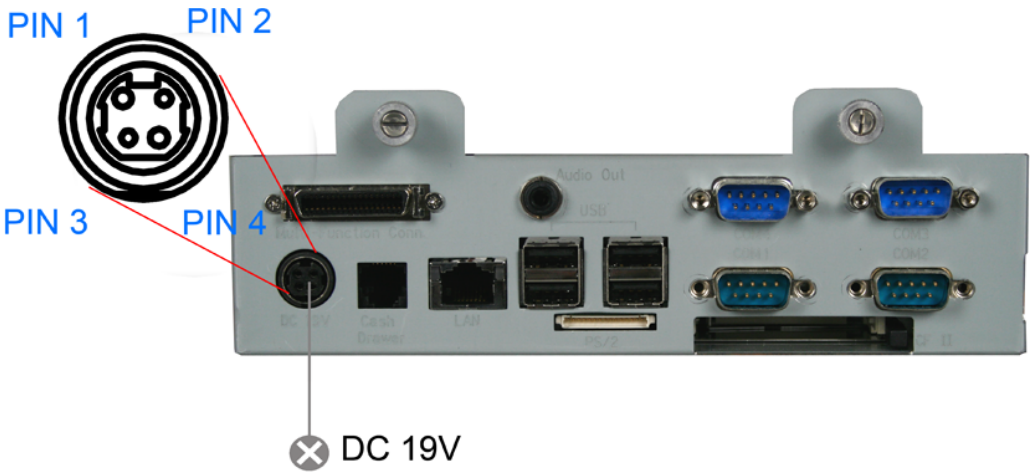
5. The tapping resumes to left mouse button clicking.

7.

I/O Definition

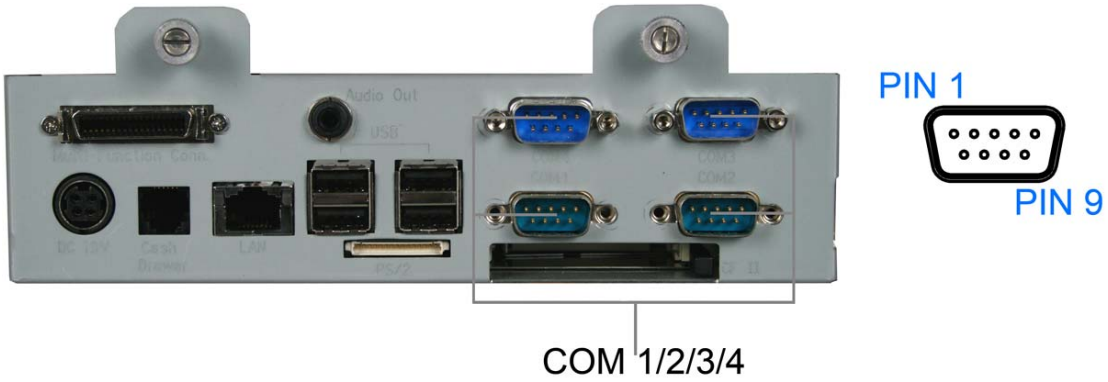
Please refer the detailed technical information about all I/O ports as followings.

7.1. Power Connector



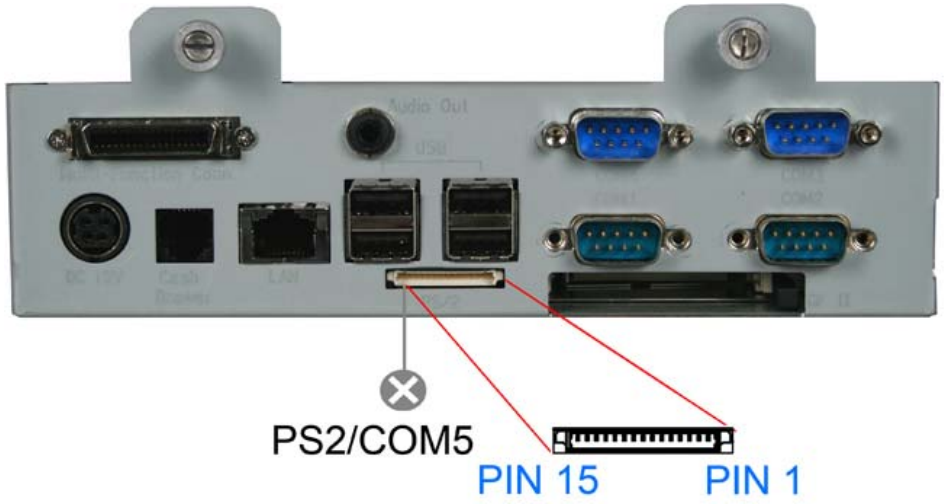
PIN	Description	PIN	Description
1	+19V	3	GROUND
2	+19V	4	GROUND

7.2. Serial Port 1/2/3/4



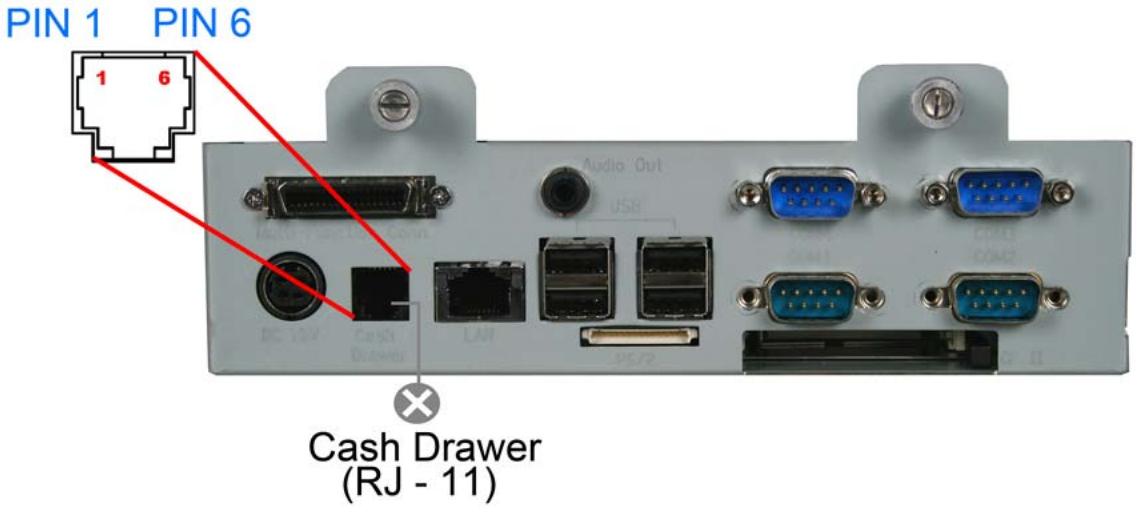
COM Port 1/2/3/4			
PIN	Description	PIN	Description
1	DCD	6	DSR
2	RXD	7	RTS
3	TXD	8	CTS
4	DTR	9	RI / 5V /12V
5	GND		

7.3. PS2/COM5



PS2/COM					
PIN	Description	PIN	Description	PIN	Description
1	GND	6	PC_CLK)KEYBOARD)	11	CTS
2	+5V	7	KB_DAT	12	RTS
3	RXD	8	KB_CLK	13	DSR
4	TXD	9	RI / 5V /12V	14	DCD
5	PC_DAT (KEYBOARD)	10	DTR	15	KB_EN

7.4. Cash Drawer Port (RJ-11)



Connector

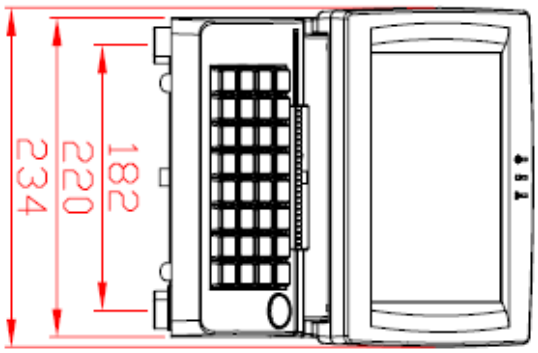
PIN	Description	PIN	Description
1	GND	4	12V
2	D_OUT	5	NC
3	D_IN	6	GND

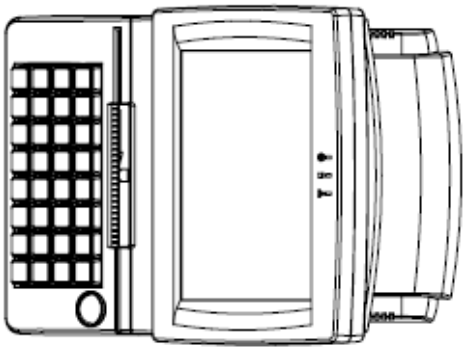
Cash Drawer Control

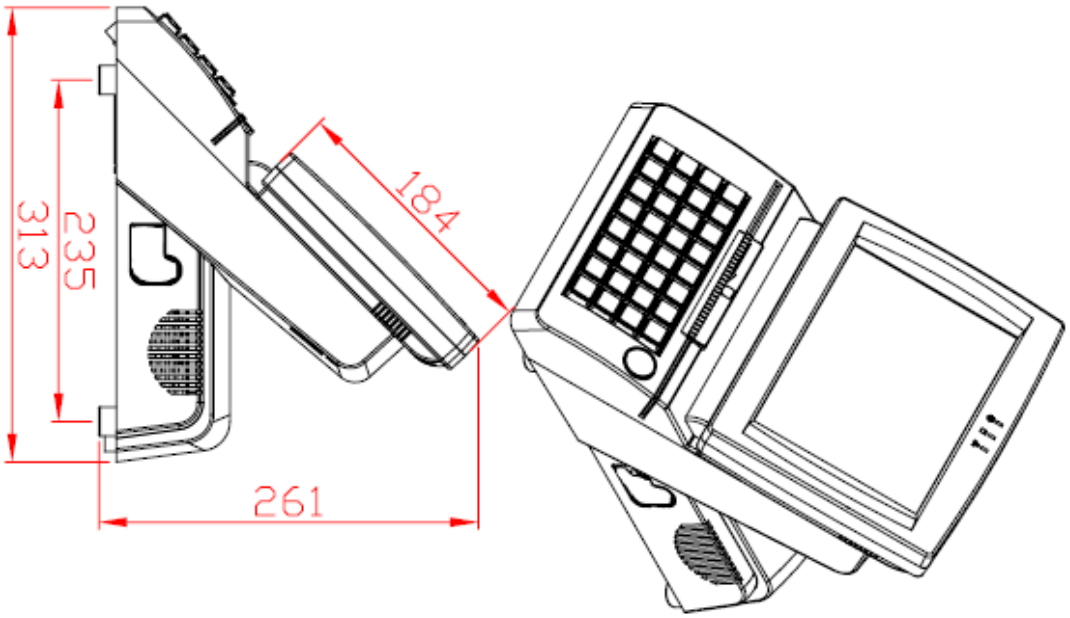
Status	Address	Value
Open	280H	Bit 4 = 0
Close	280H	Bit 4 = 1
Read Status	281H	Bit 0 = 0/1

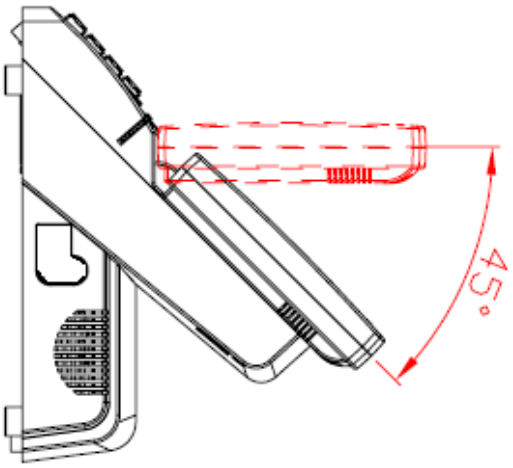
8.

Specification









TOLERANCES	
.X ± 0.2	X° ± 0.25
.XX ± 0.1	.X° ± 0.15
.XXX ± 0.05	.XX° ± 0.05

Main Board			
CPU	Intel ULV Celeron M 1GHz w/o L2 Cache		
Chipset	Intel 852GM + ICH4		
System Memory	1 x SO-DIMM, DDR 266, up to 1GB		
OS	WinXP, XPe, WEPOS, WinCE, Linux		
Display			
TFT LCD	8.4”	12.1”	15”
Brightness	220 nits	200 nits	350 nits
Resolution	800 x 600	800 x 600	1024 x 768
Touch Screen	5 Wire Resistive Type		
Tilt Angle	45 ~ 90 Degree		
Storage Device			
HDD	1 x 3.5” IDE HDD,		
Compact Flash	1 x Slot, Type II		
I/O Ports			
Serial	4 x RS-232: DB-9 (5V/12V/RI)		
Parallel	0		
USB	4 x USB2.0		
PS2 Mouse	0		
PS2 Keyboard	0		
LAN	1 x RJ45, Gigabit Ethernet		
Cash Drawer	1 x RJ11 (12V)		
Audio Jack	1 x Audio Out		
Audio	Integrated with AC 97 CODEC Speaker: 2W x 2		
Others			
Power	External DC 19V Power Adapter (90W)		
Compliance	FCC / CE		
Weight	8” (7.2 Kg), 12” (8.5 Kg), 15” (9.8 Kg)		
Dimension	8”: 234 (W) x 313 (D) x 261 (H) mm 12”: 313 (W) x 313 (D) x 317 (H) mm 15”: 370 (W) x 313 (D) x 358 (H) mm		
Temperature	Operation: 5 ~ 40 ℃ Storage: -20 - 60 ℃		
Storage Humidity	20 – 85%		